Formatted: Different first page header

ATTACHMENT A STATEMENT OF WORK DEPARTMENT OF THE NAVY RED HILL BULK FUEL STORAGE FACILITY OAHU, HAWAII

Statement of Work

Contents

[TOC \o "1-3" \h \z \u]

Introduction

This Statement of Work ("SOW") sets forth the tasks and requirements to be undertaken by the Navy and the Defense Logistics Agency ("DLA"), in compliance with the Administrative Order on Consent ("AOC") in the Matter of Red Hill Bulk Fuel Storage Facility ("Facility)," located near Pearl Harbor, on the island of Oahu in the State of Hawaii. The primary objective of the AOC and SOW is to take steps to ensure that the groundwater resource under the Facility is protected. The Navy, DLA, the Hawaii Department of Health ("DOH") and the Environmental Protection Agency ("EPA"), collectively referred to as "the Parties" in this SOW, agree that this objective can best be accomplished by ensuring that the tanks and other infrastructure at the Facility deploy the best available technology to the maximum extent practicable to prevent fuel releases, developing a better understanding of the hydrogeology of the area surrounding the Facility and conducting an assessment of the risk to the groundwater resources posed by the Facility.

The major components of the Work are summarized below:

(1) The Navy and DLA will improve upon an existing schedule of tank inspections inspection and repairs repair process to ensure that the tank infrastructure prevents releases of fuel to the maximum extent practicable;

- (2) The Navy and DLA will undertake a comprehensive study to investigate the feasibility of upgrading the tank structures including, but not limited to, secondary containment. This study will evaluate several technologies, building on similar efforts conducted by the Navy in 1998 and 2008. After completing the study, a technology or technologies will be approved and selected by DOH and EPA ("the Regulatory Agencies") and implemented by the Navy and DLA. Implementation will occur in 3-5 year phases so that all tanks in operation will be improved no later than 20 years from the selection of adeptoy best available practicable technology to apprade the tanks ("BAPT"), as approved by the Regulatory Agencies, within 22 years of the effective date of the AOC or as otherwise provided for in this agreement.
- (3) The Navy and DLA will instally double the frequency of their tank tightness testing from biennial to annual and continue to continuously monitor inventory. The The Navy and DLA shall conduct the next round of tank tightness testing no later than one year from the effective date of this AOC. As set forth below, the Navy and DLA will also conduct a study to evaluate improvements to the tank tightness and leak detection technologies deployed at the Facility and, pending the outcome of the study and approval by the Regulatory Agencies, implement improvements.
- (4) The Navy and DLA will develop models to understand groundwater flow in the areas around the Facility and evaluate the fate and transport of contaminants in the subsurface. Based As set forth below, based on the modeling effort, was approved by the Regulatory Agencies, the Navy and DLA will develop and improve the existing groundwater monitoring network will be improved and developed.
- (5) The Navy and DLA will develop a risk/vulnerability assessment in an effort to further understand the potential impacts of fuel releases on the island's drinking and groundwater supplies to be approved by the Regulatory Agencies.

[PAGE * MERGEFORMAT]

Formatted: Indent 1, Left

1. Overall Project Management

1.1 Subject Matter Experts Involvement

It is the intent of the Parties to seek the technical advice of subject matter experts, such as the <u>Monoiula</u> Board of Water Supply and the Hawaii Department Land of Natural Resources, as needed, for scoping and review of key deliverables.

1.2 Community Involvement

The Parties will update the public jointly based on public interest and at the request of one of the stakeholders. The Navy and DLA shall submit a synopsis of each final report <u>todeveloped under</u> the <u>AOC and this SOW to the</u> Regulatory Agencies that will be available to the public.

1.3 Meetings

Meetings may consist of in-person, telephone, or video-conferences, the form of which will be based on budget constraints, schedules, and other considerations. Within ten (10) business days of a meeting, the Navy and DLA shall circulate a summary of the meeting to the Parties for concurrence. The Parties may request additional meetings beyond the meetings outlined in this SOW, as needed.

1.4 Regulatory Agency Written Responses

The Regulatory Agencies will provide joint, written responses for all responses to the Navy and DLA under Section 7 of the AOC (Regulatory Agencies' Approval of Deliverables).

1.5 Quality Assurance

The Navy and DLA shall include a discussion of quality assurance and quality control (QA/QC) procedures in each Scope of Work submitted to the Regulatory Agencies for approval as required in this SOW. The QA/QC procedures shall be used to ensure that environmental or other data generated meets standards established by the Parties.

When appropriate, QA/QC procedures shall follow EPA's Quality Systems for Environment and Technology which are available at [HYPERLINK "http://www.epa.gov/quality/"]. Navy and DLA shall only use laboratories that have a documented quality system that complies with the "Uniform Federal Policy for Quality Assurance Project Plans" (March 2005), and the "EPA Requirements for Quality Management Plans for Environmental Data Operations (QA/R-5)" (EPA/240/B-01/003, March 2001), or equivalent documentation as determined by EPA.

The Navy and DLA shall submit an overall Quality Assurance Program Plan (QAPP) for the work to be done under this SOW that generates data, describing the overall approach to be utilized for QA/QC for each applicable Task in this SOW. This brief plan shall be submitted for Regulatory Agencies approval within sixty (60) days of the Effective Date of the AOC.

Upon approval by the Regulatory Agencies, the overall QAPP shall be implemented for each applicable task under the AOC and this SOW.

[PAGE * MERGEFORMAT]

Formatted: Font: +Body (Times New Roman), 12 pt, Font color: Auto

Formatted: Heading 2

Formatted: Font: +Body (Times New Roman), Not Bold

2. Tank Inspection and Repair Procedures

The purpose of the these deliverables to be developed under this Paragraph is to evaluate and document tank inspection and repair procedures to ensure the continued integrity of the underground storage tank ((UST)) system at the Facility. At a minimum, this deliverable will evaluate and document the following:

- Current tank inspection and repair procedures;
- Lessons learned from Tank 5 and related modifications to current procedures;
- Quality Control and Assurance of tank inspection and repair;
- o Improvement opportunities;
- o Schedule/frequency of modified API 653 tank inspections and repairs; and
- o Tank re-commissioning procedures up to and including the re-filling process.

2.1 Scoping Meeting for Tank Inspection and Repair Procedures Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the seoping meeting Scoping Meeting will be to detail the contents of the Tank Inspection and Repair Procedures Report.

2.2 Tank Inspection and Repair Procedures Report

Within 120 days from the Scoping Meeting, the Navy and DLA shall submit a Tank Inspection and Repair Procedures Report to the Regulatory Agencies for approval. The Tank Inspection and Repair Procedures Report shall describe the current procedures and present options for improvements.

2.3 Tank Inspection and Repair Procedures Decision Meeting

Within sixty (60) days from the approval by the Regulatory Agencies of the Tank Inspection and Repair Procedures Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to outline the Tank Inspection and Repair Procedures Implementation Plan for improvements to future tank inspection and repair. During the meeting, the options criteria, and weighting factors for the decision will be discussed, and all parties will communicate their preferences. The specific decisions will not be made during this meeting. The final decisions will be established at the point the Regulatory Agencies approve the decision document.

2.4 Tank Inspection and Repair Procedures Decision Document/Implementation Plan

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a Tank

Decision Decument and Inspection and Repair Procedures Implementation Plan and schedule to the

Regulatory Agencies for approval. Once approved by the Regulatory Agencies, the Navy shall proceed
with implementation of the Tank Decision Document and Inspection and Repair Procedures

Implementation Plan.

3. Tank Upgrade Alternatives

The purpose of the deliverables to be developed under this Paragraph will be to determine the best available practicable technologies ((*BAPT)*) that can be applied to the USTs at the Facility to

prevent releases. After the approval of BAPT, it the Navy and DLA shall be applied apply BAPT to all in-service tanks as part of their respective maintenance and repair cycles in accordance with schedules established in the Tank Upgrade Alternatives Implementation Plan—As individual tanks enter the repair cycle, the most current version of BAPT approved by the Regulatory Agencies shall be implemented as part of the individual tank's maintenance and repairs. The BAPT will likely change, as new technologies become available.

All in-service tanks, actively storing fuel or other product, shell have the BAPT incorporated no later than twenty-two (22) years from the Effective Date of the AOC.

The Navy and DLA shall complete upgrades to the Red Hill tanks in accordance with BAPT as approved by the Regulatory Agencies of all Red Hill tanks actively storing fuel within 22 years of the Effective Date of the AOC. Tanks not meeting this BAPT upgrade deadline shall be immediately taken out of service until the BAPT upgrade can be completed. If the mitial BAPT decisions requires military construction funding (a "MILCON"), an extension of up to 5 years on the original 22 year deadline may be granted by the Regulatory Agencies. The Navy and DLA shall make a good faith effort to comply with the original 22 year deadline even if a MILCON is required to meet the original BAPT.

At a minimum, the deliverable will evaluate the following:

- o Tank Upgrades;
- o Secondary Containment Alternatives;
- o Coatings;
- o Liners/Bladders;
- o Associated Leak Detection Systems; and
- Other Alternatives.

3.1 Initial Scoping Meeting for Tank Upgrade Alternatives Report

Within thirty (30) days of the Effective Date of the AOC, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the Scoping Meeting will be to detail the contents of the Scope of Work for this section.

3.2 Tank Upgrade Alternatives Scope of Work

Within ninety (90) days from the final Scoping Meeting, the Navy and DLA shall submit the Scope of Work for Tank Upgrade Alternatives to the Regulatory Agencies for approval.

3.3 Tank Upgrade Alternatives Report

Within twelve (12) months from when the Scope of Work is approved, the Navy and DLA shall submit a Tank Upgrade Alternatives Report to the Regulatory Agencies for approval.

3.4 Tank Upgrade Alternatives Decision Meeting

Within sixty (60) days from the Regulatory Agencies' approval of the Tank Upgrade Alternatives Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to determine subsequent actions for maintaining,

[PAGE * MERGEFORMAT]

Formatted: Indent: First line: 0.5"

repairing, and upgrading the USTs at the Facility. <u>During the meeting, the options, criteria, and</u> weighting factors for the decision will be discussed, and all parties will communicate their preferences. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

3.5 Tank Upgrade Alternatives Decision Document/Implementation Plan

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a Tank Upgrade Alternatives Decision Document ([TUA Decision Document)] to the Regulatory Agencies for approval. The TUA Decision Document shall recommended the BAPT to be applied to the inservice tanks at the Facility at the beginning of their inspection and repair cycle. The Navy and DLA shall also submit a TUA implementation Plan with the TUA Decision Document and include a proposed schedule for implementation. The beginning of the inspection and repair cycle shall be defined in the TUA Decision Document and Implementation Plan. The TATUA Decision Document will incorporate, as appropriate, the decisions made under sections 2 and 4 of this SOW. Once approved by the Regulatory Agencies, the Navy shall proceed with implementation of the TUA Decision Document and Implementation Plan in accordance with the approved schedule.

3.6 Tank Upgrade Alternatives Re-evaluation

At least once every five (5) years from the approval of the TUA Decision Document, the Navy and DLA shall evaluate new technologies to determine if new technologies may be available and practicable to implement in the Facility. The Navy and DLA shall propose a scope and process ("recevaluation SOW") for this re-evaluation to the Regulatory Agencies for their approval for each re-evaluation period. This re-evaluation process shall commence with the submittal of a re-evaluation SOW within 54 months of the Regulatory Agencies' approval of the TUA Decision Document for the initial re-evaluation, and within 54 months of the Regulatory Agencies approval of the last re-evaluation report for the subsequent re-evaluations. A re-evaluation result report, and subsequent decision document and implementation plan, subject to the approval of the Regulatory Agencies, will be part of the scope of the re-evaluation process. The Regulatory Agencies may update the required BAPT based on the results of these re-evaluations.

4. Leak Detection Systems ("LDS") and Tank Tightness Testing

The purpose of these deliverables is to document the current LDS and tank tightness systems testing procedures used at the Facility and to evaluate modifications to the leak detection and tank tightness systems testing procedures which could be applied to the Facility.

4.1 Tank Tightness Testing Frequency.

Until the approval of the LDS and Tank Tightness Testing Decision Documents Implementation plan as described in Sections 4.6 and 4.8 below, the Navy and DLA shall increase their tank tightness testing from a biennial test to an annual test, continue to use an inventory control monitoring system, and conduct monthly vapor monitoring for all tanks in service.

Formatted: Font: Times New Roman, 12 pt, Font color:

Formatted: Heading 2

Formatted: Font: Not Bold

Formatted: Line spacing: single

Formatted: Indent: First line: 0.5'

[PAGE * MERGEFORMAT]

Formatted: Font: +Body (Times New Roman), Not Bold

Formatted: Heading 2

ED 006532 00004803-00007

4.2 Outline for Current Fuel ReleaseLeak Detection Monitoring Systems Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall submit a document detailing outlining the contents of the Current Fuel-ReleaseLeak Detection Monitoring Systems Report ("Current Fuel-ReleaseLeak Detection Monitoring Systems Report Outline") to the Regulatory Agencies for approval.

4.3 Current Fuel-ReleaseLeak Detection Monitoring Systems Report

Within sixty (60) days from approval of the Current Fiel-Release Leak Detection Monitoring Systems Report Outline, the Navy and DLA shall submit a Current Fiel-Release Leak Detection Monitoring Systems Report to the Regulatory Agencies for approval. At a minimum, the Report shall include:

- o Recordkeeping procedures;
- o Dynamic filling procedures for re-commissioning and daily operations;
- Static and Dynamic Leak Detection Systems;
- o Leak detection sensitivity; and
- o Provide the 2008 LDS Study and 2014 Market Survey Update.

4.4 Initial Scoping Meeting for New LDS and Tank Tightness Systems Testing

Within sixty (60) days from Regulatory approval of the Current Fael-ReleaseLeak Detection Monitoring Systems Report, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting Scoping Meeting will be to detail the contents of the Scope of Work for the study to evaluate possible new or improved LDS and Tank Tightness systems testing procedures.

4.5 New LDS and Tank Tightness Systems Testing Procedures Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the New Leak Detection and Tank Tightness Systems Testing Procedures Scope of Work to the Regulatory Agencies for approval.

4.6 New LDS and Tank Tightness Testing Procedures Report

Within twelve (12) months from approval of the <u>New Leak Detection and Tank Tightness</u>
Systems Testing Procedures Scope of Work, the Navy and DLA shall submit a New Leak Detection and Tank Tightness Systems Testing Procedure Technology Report to the Regulatory Agencies for approval. The New LDSLeak Detection and Tights Testing Tank Tightness Systems Testing Procedure Technology Report shall include:

- o A description of existing practices;
- o Static and Dynamic Leak Detection System Alternatives;
- Tank tightness system alternatives;
- o Comparison of existing and alternative technologies effectiveness; and
- Decision Matrix.

4.7 New LDS and Tank Tightness Testing Decision Meeting

Within sixty (60) days from the Regulatory Agencies' approval of the New Leak Detection and Tank Tightness Systems Technology Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to determine subsequent actions for implementing the new LDS and tank tightness systems as appropriate. During the meeting, the options, criteria, and weighting factors for the decision will be discussed, and all parties will communicate their preferences. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

4.8 New LDS and Tank Tightness Testing Decision Document/Implementation Plan

Within sixty (60) days after the Decision Meeting, the Navy and DLA shall submit a Tank Tightness Decision Document/and Implementation Plan including an implementation schedule to the Regulatory Agencies for approval. Once approved by the Regulatory Agencies, the Navy and DLA shall proceed with implementation of the Tightness Decision Document and Implementation Plan in accordance with the approved schedule.

5. Corrosion and Metal Fatigue Assessment Practices

The purpose of thesethe deliverables to be developed under this Paragraph is to understand the possibility and extent of corrosion and metal fatigue as well as practices to control corrosion and metal fatigue at the Facility.

The Navy and DLA shall maintain records of and continue efforts to complete internal cleaning and inspection of the aboveground pipelines in the tunnels within the Facility.

5.1 Outline of Corrosion and Metal Fatigue Assessment Practices Report

Within thirty (30) days of the Effective Date of the AOC, the Navy and DLA shall submit an outline detailing the contents of the pending Corrosion and Metal Fatigue Assessment Report Practices Report ("Outline of Corrosion and Metal Fatigue Practices Report") to the Regulatory Agencies for approval.

5.2 Corrosion and Metal Fatigue Assessment Practices Report

Within sixty (60) days from approval of the Outline of Corrosion and Metal Fatigue

Assessment Practices Report, the Navy and DLA shall submit a Corrosion and Metal Fatigue

Assessment Practices Report to the Regulatory Agencies for approval. The Corrosion and Metal

Fatigue Practices Report shall include, among other things, an explanation of the gurrent practices for assessing the condition of the tanks and associated fuel contaminent infrastructure, including details on the non-destructive testing procedures. Additionally the report will describe the recordkeeping procedures for corrosion and metal fatigue testing and assessment at the Red Hill Facility.

[PAGE * MERGEFORMAT]

Formatted: Indent: First line: 0.5"

5.3 Scoping Meeting

Within ninety (90) days from the approval of the Corrosion and Metal Fatigue

Assessment Practices Report, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the Destructive Testing Scope of Work.

Formatted: Font: +Body (Times New Roman), 12 pt, Font color: Auto

Formatted: Font: +Body (Times New Roman), Not Bold

Formatted: Heading 2

5.4 Destructive Testing

The purpose of theosthe deliverables to be developed under this Paragraph is to verify the results findings of nondestructive corresion the Corresion and Metal Fatigue Practices Report through the use of destructive testing foron the USTs at the Facility.

Formatted: Indent: First line: 0.5"

5.4.1. Destructive Testing Scope of Work

Within ninety (90) days from the Scoping Meeting, the Navy and DLA shall submit a Destructive Testing Scope of Work, including a plan for implementation and a proposed schedule, to the Regulatory Agencies for approval. The Scope of Work shall detail proposed planned destructive testing to be conducted on at least one (1) UST at the Facility-to. Once approved by the Regulatory Agencies—, the Navy shall proceed with implementation of the Scope of Work in accordance with the approved schedule contained in the plan.

Formatted: Font color: Auto

Formatted: Font: +Body (Times New Roman), Font color:

Formatted: Font: +Body (Times New Roman)

Formatted: Indent: First line: 0.5", Space After: 0 pt

Formatted: Space After: 10 pt

5.4.2. Destructive Testing Results Report

Within twenty-four (24) months from the approval of the Destructive Testing Scope of Work, the Navy and DLA shall submit the Destructive Testing Results Report to the Regulatory Agencies for approval.

5.5 Decision on Need for and Scope of Modified Corrosion and Metal Fatigue Practices

If the previous tasks in this section indicate the need for evaluation and implementation of potential changes in practices to control corrosion and metal fatigue as determined by the Regulatory Agencies, the Navy and DLA shall proceed with implementation of Tasks 5.5.1 and 5.5.2.

5.5.1 Modification of Corresion and Metal Fatigue Practices Decision Meeting

Within sixty (60) days from the Regulatory Agencies' approval of the Destructive Testing Results Report, and if the Regulatory Agencies determined that changes in practices may be warranted, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to determine subsequent actions changing the corrosion and metal fatigue practices. During the meeting, the options, criteria, and weighting factors for the decision will be discussed, and all parties will communicate their preferences. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

5.5.2 Modification of Corrosion and Metal Fatigue Practices Decision Document/Implementation Plan

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a Modification of Corrosion and Metal Fatigue Practices Decision Document and an Implementation Plan and schedule to the Regulatory Agencies for approval. Once approved by the Regulatory Agencies, the Navy shall proceed with implementation of the approved plan.

6. Investigation and Remediation of Releases

The purpose of these deliverables is to determine the feasibility of alternatives for investigating and remediating releases from the Facility. The deliverables shall include:

- * The response to the January 2014 release from Tank # 5
- A discussion of potential remediation methods for the January 2014 release fund-past releases).

and proceed with work in accordance with an approved implementation plan for investigating and remediating releases.

Formatted: Normal, Indent: Left: 0'

6.1 Initial Scoping Meeting for Investigation and Remediation of Releases

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the Scoping Meeting will be to detail the contents of the Investigation and Remediation Releases Scope of Work.

6.2 Investigation and Remediation of Releases Scope of Work

Within sixty (60) days of the final Scoping Meeting, the Navy and DLA shall submit the Investigation and Remediation of Releases Scope of Work to the Regulatory Agencies for approval.

6.3 Investigation and Remediation of Releases Report

Within twenty-four (24) months from the approval of the the Investigation and Remediation of Releases Scope of Work, the Navy and DLA shall submit the Investigation and Remediation Releases Report to the Regulatory Agencies for approval.

6.4 Investigation and Remediation of Releases Decision Meeting

Within sixty (60) days from the Regulatory Agencies' approval of the Investigation and Remediation of Releases Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to determine valuate the feasibility to investigate and remediate potential releases from the Facility to the maximum extent practicable. During the meeting, the options, criteria, and weighting factors for the decision will be discussed, and all parties will communicate their preferences. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

Formatted: Indent: First line: 0.5"

6.5 Investigation and Remediation of Releases Decision Document/Implementation Plan

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a <u>Decision</u> Document and Implementation Plan for the Investigation and Remediation of Releases, including a <u>proposed schedule for implementation plan and schedule</u>, to the Regulatory Agencies ("the Investigation and Remediation of Releases Decision Document and Implementation Plan"). Once approved by the Regulatory Agencies, the Navy shall proceed with implementation of the Investigation and Remediation of Releases Decision Document and Implementation Plan in accordance with the approved schedule.

7. Groundwater Protection and Evaluation

The purpose of thesethe deliverables to be developed under this Paragraph is to monitor and characterize the flow of groundwater around the Facility. The Navy and DLA shall update the existing Groundwater Protection Plan to include response procedures and trigger points in the event that contamination from the Facility shows movement toward any drinking water well. The collective work done pursuant to all sub-tasks in this section shall be used to inform the changes to the Groundwater Protection Plan. This task may include the installation of additional monitoring wells as needed.

7.1 Groundwater Flow Model Report

The purpose of this deliverable is to refine the existing groundwater flow model and improve the understanding of the direction and rate of groundwater flow within the aquifers around the Red HER Facility.

7.1.1 Initial Scoping Meeting for Groundwater Flow Modeling Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for the Groundwater Flow Model Report.

7.1.2. Groundwater Flow Modeling Report Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the Groundwater Flow Model Scope of Work to the Regulatory Agencies for approval. The Groundwater Flow Model Scope of Work shall consider interim deliverables to refine the groundwater flow modeling and related data requirements prior to completion of the Groundwater Flow Modeling Report. At a minimum, progress reports shall be provided to the Regulatory Agencies every four (4) months after approval of the Groundwater Flow Modeling Report.

7.1.3. Groundwater Flow Monitoring Modeling Report

Within twenty-four (24) months from the approval of the Groundwater Flow Model Report Scope of Work, the Navy and DLA shall submit a Groundwater Flow Model Report to the Regulatory Agencies for approval.

7.2 Contaminant Fate and Transport Model Report

The purpose of the Contaminant Fate and Transport Report is to refineutilize the existing groundwater flow model and improve the understanding of the potential fate and transport, degradation, and transformation of contaminants that have been and could be released from the Facility.

7.2.1 Initial Scoping Meeting for Contaminant Fate and Transport Model Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for the Contaminant Fate and Transport Model.

7.2.2. Contaminant Fate and Transport Model Report Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the Contaminant Fate and Transport Model Scope of Work to the Regulatory Agencies for approval.

7.2.3. Contaminant Fate and Transport Model Praise Final Report

Within one-hundred and eighty (180) days from the Groundwater Flow Model Report Approval, the Navy and DLA shall submit a Contaminant Fate and Transport Model Report to the Regulatory Agencies for approval.

7.3 Groundwater Monitoring Well Network

The primary purpose of the deliverable is to evaluate the number and placement of groundwater monitoring wells required to adequately identify possible contaminant migration. The secondary purpose of this deliverable is to obtain additional data for the Groundwater Flow Model and Contaminant Fate and Transport Model Report.

7.3.1 Initial Scoping Meeting for Groundwater Monitoring Well Network

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for the Groundwater Monitoring Well Network.

7.3.2 Seasing Wells Network Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the Groundwater Monitoring Well Network Scope of Work to the Regulatory Agencies for approval. The Groundwater Monitoring Well Network Scope of work shall consider interim deliverables for developing a groundwater monitoring well network based activities to develop the groundwater flow modeling and related data requirements.

7.3.3 Groundwater Monitoring Well Network Draft Final Report

Within twelve (12) months from approval of the Groundwater Flow Model Report, the Navy and DLA shall submit a Groundwater Monitoring Well Network Report. This report will include a recommendation of the number and location of groundwater monitoring wells including those already installed and potential new wells to the Regulatory Agencies for approval.

7.3.4 Groundwater Monitoring Well Network Decision Meeting

Within sixty (60) days from approval of the Groundwater Monitoring Well Network Final Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to determine evaluate subsequent actions for implementing the new Groundwater Monitoring Well Network. During the meeting, the options, criteria, and weighting factors for the decision will be discussed, and all parties will communicate their preferences. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

7.3.5 Groundwater Monitoring Well Network Decision Document/Implementation Plan

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a Decision Document and Implementation Plan for the Groundwater Modeling Well Network, including an implementation a proposed schedule, to the Regulatory Agencies for approval. Once approved by the Regulatory Agencies, the Navy shall proceed with implementation of the Decision Document and Implementation Plan for the Grandwater Modeling Well Network in accordance with the approved schedule.

8. Risk/Vulnerability Assessment

The purpose of this the deliverable to be developed under this Paragraph is to assess the level of risk the Facility poses to the groundwater and drinking water aquifers.

The Risk/Vulnerability Assessment Report may include:

- A risk matrix;
- o Probability of the catastrophic events (seismic events, leaks);
- Hydrology studies, as completed;
- o Probability of mechanical and human errors; and
- Effectiveness of risk mitigation measures.

8.1 Initial Scoping Meeting for Risk/Vulnerability Assessment

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold a Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for Risk/Vulnerability Assessment.

8.2 Risk/Vulnerability Assessment Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the Risk/Vulnerability Assessment Scope of Work to the Regulatory Agencies for approval.

8.3 Initial Risk/Vulnerability Assessment Report

Within eighteen (18) months from the Regulatory Agencies' approval of the Risk/Vulnerability Assessment Scope of Work-is approved, the Navy and DLA shall submit an Initial Risk/Vulnerability Assessment Report to the Regulatory Agencies for approval. The Risk/Vulnerability assessment may be revised subject to the Regulatory Agencies' approval as new information becomes available. All revisions to the document shall be submitted to the Regulatory Agencies for approval.

Formatted: Indent: Left: 0.5", No bullets or numbering

1.,